

IN THE CLAIMS:

All claims not withdrawn are reiterated for the convenience of the Examiner. Please cancel Claims 10, 27, and 38 without prejudice. Please amend Claims 9, 11-12, 17-18, 20, 23-26, 28-37, and 39-43 as follows:

9. (Twice Amended) An isolated or recombinant polynucleotide that:

- a) [selectively] hybridizes under stringent wash conditions of at least 55[0]° C and less than [5]400 mM salt to the open reading frame of SEQ ID NO: 1 or 3; and
- b) encodes a polypeptide that:
 - i) is expressed on activated T cells; and
 - ii) specifically binds a polyclonal antibody generated against SEQ ID NO: 2 or 4.

10. (Canceled) The polynucleotide of Claim 9, which:

- a) encodes a mature polypeptide of SEQ ID NO: 2 or 4, that lacks an N terminal leader sequence;
- b) comprises a [the] mature polypeptide coding portion of SEQ ID NO: 1 or 3, that does not encode an N terminal leader sequence;
- c) comprises a [the] extracellular domain of SEQ ID NO: 2 or 4; or
- d) comprises a [the] intracellular domain of SEQ ID NO: 2 or 4.

21. (Twice Amended) A recombinant expression or replicating vector comprising [said] the isolated or recombinant polynucleotide of Claim 9.

12. (Twice Amended) A kit comprising

- a) [said] the isolated or recombinant polynucleotide of Claim 9; and
- b) instructions for use or disposal of reagents in said kit.

5 17. (Twice Amended) A method of producing a polypeptide, comprising expressing [said] the recombinant expression or replication vector of Claim 11 in a host cell and isolating said polypeptide, thereby producing said polypeptide.

3 18. (Twice Amended) A cell comprising [said] the recombinant expression or replication vector of Claim 11.

19. (Reiterated) A recombinant or isolated polynucleotide of Claim 9, that encodes at least 15 contiguous amino acid residues of SEQ ID NO: 4.

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20. (Twice Amended) The isolated or recombinant polynucleotide of Claim 19, wherein said contiguous amino residues number at least 17.

10 23. (Amended) The isolated or recombinant polynucleotide of Claim 9, wherein said hybridization occurs over the entire open reading frame of SEQ ID NO: 1.

11 24. (Amended) The isolated or recombinant polynucleotide of Claim 9, wherein said polynucleotide is a variant due to the degeneracy of the genetic code[:
a) encodes a polypeptide with a natural sequence of the mature coding portion of SEQ ID NO: 2;
b) encodes a polypeptide with a natural sequence of the mature coding portion of SEQ ID NO: 4;
c) is isolated from nature;
d) encodes a polypeptide comprising 5 or fewer conservative substitutions from a natural sequence of SEQ ID NO: 2; or
e) encodes a polypeptide comprising 5 or fewer conservative substitutions from a natural sequence of SEQ ID NO: 4].
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25. (Amended) The isolated or recombinant polynucleotide of Claim 9, wherein said wash conditions are

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a) at least 60[5]° C;
b) less than 150 mM salt; or
c) both a) and b).

26. (Amended) A method of producing a polynucleotide duplex comprising contacting [said] the isolated or recombinant polynucleotide of Claim 9 with a second polynucleotide for a time sufficient to produce said duplex under stringent wash conditions of at least 60° C and less than 250[0] mM salt; thereby forming said duplex.

27. (Canceled) The isolated or recombinant polynucleotide of Claim 9, which is:

- a) is attached to a solid substrate;
- b) is detectably labeled;
- c) is in a sterile composition;
- d) encodes an antigenic polypeptide having at least 12 amino acid residues; or
- e) is synthetically produced.

8 28. (Amended) The isolated or recombinant polynucleotide of Claim 19, which comprises:

- a) at least 57 contiguous nucleotides from the mature protein coding portion of SEQ ID NO: 1 or 3 that lacks an N terminal leader sequence; or
- b) is a variant due to the degeneracy of the genetic code.

9 29. (Amended) The isolated or recombinant polynucleotide of Claim 28[7], wherein:

- a) [said contiguous amino acid residues number at least 21; or
- b)] said contiguous nucleotides are from nucleotides 26-165 or nucleotides 191-241 of SEQ ID NO: 4.

30. (Amended) An isolated or recombinant polynucleotide encoding a polypeptide that:

- a) has a conservative amino acid substitution of a mature polypeptide of SEQ ID NO: 2 or 4 that lacks an N terminal leader sequence;
- b) is a natural allelic variant of the mature native polypeptide of SEQ ID NO: 2 or 4 that lacks an N terminal leader sequence; or
- c) is a species variant of the mature native polypeptide of SEQ ID NO: 2 or 4 that lacks an N terminal leader sequence.

31. (Amended) The isolated or recombinant polynucleotide of Claim 30, which is from SEQ ID NO: 4.

32. (Amended) The isolated or recombinant polynucleotide of Claim 30, comprising:

- a) nucleotides 124 to 751 of SEQ ID NO: 1; or

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b) nucleotides 54 to 723 of SEQ ID NO: 3.

33. (Amended) A method of producing a polynucleotide duplex comprising contacting [said] the isolated or recombinant polynucleotide of Claim 30 with a second polynucleotide for a time sufficient to produce said duplex under stringent wash conditions of at least 60° C and less than 200 mM salt; thereby forming said duplex.

27 34. (Amended) A recombinant expression or replicating vector comprising [said] the isolated or recombinant polynucleotide of Claim 30. 23

28 35. (Amended) A cell comprising [said] the recombinant expression or replication vector of Claim 34. 27

36. (Amended) A method of producing an antigenic polypeptide, comprising expressing [said] the recombinant expression or replication vector of Claim 34 in a host cell and isolating said antigenic polypeptide, thereby producing said antigenic polypeptide.

30 37. (Amended) A recombinant or isolated polynucleotide that [selectively] hybridizes to the open reading frame of SEQ ID NO: 1 or 3 under stringent hybridization and wash conditions of at least 55[0]°C, a salt concentration of less than 250[0] mM, and 50% formamide.

38. (Canceled) The polynucleotide of Claim 37:

- a) wherein said wash conditions are at least 7[6]0°C;
- b) that encodes an antigenic polypeptide;
- c) comprises at least 36 contiguous nucleotides of the mature coding portion of SEQ ID NO: 1 or 3 that does not encode an N terminal leader sequence; or
- d) comprises at least 20 contiguous amino acids of the mature coding of SEQ ID NO: 4 that lacks an N terminal leader sequence.

39. (Amended) The polynucleotide of Claim 37, further encoding:

a) [a two-fold or] less than three conservative amino acid substitutions of a mature polypeptide of SEQ ID NO: 2 or 4 that lacks an N terminal leader sequence []

b) a natural allelic variant of the native polypeptide of SEQ ID NO: 2 or 4;
or

c) a species variant of the native polypeptide of SEQ ID NO: 2 or 4].

40. (Amended) A recombinant expression or replicating vector comprising:

a) said polynucleotide of Claim 37; or

b) the mature polypeptide of SEQ ID NO: 4 that lacks an N terminal leader sequence.

37 41. (Amended) A cell comprising [said] the recombinant expression or replication vector of Claim 40. 31

37 42. (Amended) A method of producing an antigenic polypeptide, comprising expressing [said] the recombinant expression or replication vector of Claim 41 in a host cell and isolating said polypeptide, thereby producing said polypeptide.

43. (Amended) A method of producing a polynucleotide duplex comprising contacting said polynucleotide of Claim 37 with a second polynucleotide for a time sufficient to produce said duplex under stringent wash conditions of at least 60° C and less than 250[0] mM salt; thereby forming said duplex.

NEW CLAIMS:

Please add new claims 44-50 as follows (Note, New Claims 44-50 represent the allowable subject matter of Claims 10, 27, 29, and 38 which has been split into separate groupings from their former Markush format. See below for further explanation.):

--44. (New) The polynucleotide of Claim 9, which:

a) encodes a mature polypeptide of SEQ ID NO: 2 or 4, that lacks an N terminal leader sequence; or

b) comprises a extracellular domain of SEQ ID NO: 2 or 4.

45. (New) The polynucleotide of Claim 9, which:

- a) comprises a mature polypeptide coding portion of SEQ ID NO: 1 or 3, that does not encode an N terminal leader sequence;
- c) comprises a intracellular domain of SEQ ID NO: 2 or 4.

14 46. (New) The isolated or recombinant polynucleotide of Claim 9, which is:

- a) is attached to a solid substrate; or
- b) is detectably labeled.

47. (New) The isolated or recombinant polynucleotide of Claim 9, which is:

- a) is in a sterile composition;
- b) encodes an antigenic polypeptide having at least 12 amino acid residues; or
- c) is synthetically produced.

48. (New) The isolated or recombinant polynucleotide of Claim 47, wherein said contiguous amino acid residues number at least 21.

49. (New) The polynucleotide of Claim 37:

- a) wherein said wash conditions are at least 70°C; or
- b) comprises at least 36 contiguous nucleotides of the mature coding portion of SEQ ID NO: 1 or 3 that does not encode an N terminal leader sequence.

50. (New) The polynucleotide of Claim 37:

- a) that encodes an antigenic polypeptide; or
- b) comprises at least 20 contiguous amino acids of the mature coding of SEQ ID NO: 4 that lacks an N terminal leader sequence.--